The power of empowerment: Predictors and benefits of shared leadership in organizations

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24 Abstract

25	Leadership plays an essential part in creating competitive advantage and well-being among
26	employees. One way in which formal leaders can deal with the variety in responsibilities that comes
27	with their role, is to share their responsibilities with team members (i.e., shared leadership). Although
28	there is abundant literature on how high-quality peer leadership benefits team effectiveness and well-
29	being, there is only limited evidence about the underpinning mechanisms of these relationships and
30	how the formal leader can support this process. To address this lacuna, we conducted an online
31	survey study with 146 employees from various organizations. The results suggest that an
32	empowering leadership style of the formal leader is associated with higher perceived peer leadership
33	quality on four different leadership roles (i.e., task, motivational, social, and external leader). In
34	addition, formal leaders who empower their team members are also perceived as better leaders
35	themselves. Moreover, the improved peer leadership quality was in turn positively related to team
36	effectiveness and work satisfaction, while being negatively related to burnout. In line with the Social
37	Identity Approach, we found that team identification mediated these relationships. Thus, high-quality
38	peer leaders succeeded in creating a shared sense of 'us' in the team, and this team identification in
39	turn generated all the positive outcomes. To conclude, by sharing their lead and empowering the peer
40	leaders in their team, formal leaders are key drivers of the team's effectiveness, while also enhancing
41	team members' health and well-being.
42	Keywords: shared leadership, empowering leadership, Social Identity Approach, peer leadership

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- 43 quality, team effectiveness, well-being.

1 Introduction

45	For many decades, organizational structures were vertically structured with the formal leader being
46	hierarchically placed above the followers. This conceptualization inferred that leadership is a
47	downward process in which a single individual in a team or organization – the formal leader –
48	influences his or her followers (Pearce & Conger, 2003; Bass & Bass, 2008). However, since the
49	beginning of the new millennium, organizations are faced with fast-changing environments and
50	increasing workload with complex tasks (Day et al., 2004). These changes place unrealistic
51	expectations upon formal leaders, as it is unlikely that a single person can effectively perform all
52	leadership responsibilities (Yukl, 2010). As a result, organizations have increasingly started to
53	question this conventional single-leader paradigm.
54	This debate gave rise to a shared leadership approach, which implies that rather than burdening one
55	individual with all the responsibilities, it is more realistic and effective to rely on the strengths of the
56	team members to share these leadership tasks. The concept of shared leadership has been defined as
57	"an emergent team property that results from the distribution of leadership influence across multiple
58	team members" (Carson et al., 2007, p. 1218). This approach entails that leaders cannot only be
59	formally appointed in their role, with leadership responsibilities being officially and explicitly
60	assigned to them (e.g., managers, directors). Instead, leaders can also emerge as informal leaders due
61	to their natural interactions with their colleagues (Pearce & Conger, 2003).
62	During the last decade, the interest in shared leadership has substantially increased and the topic
63	receives considerable recognition in performance psychology. Indeed, research in organizational
64	teams revealed a positive impact of shared leadership above and beyond that of vertical leadership
65	structures on a variety of outcomes, including goal commitment, team confidence, and tangible
66	performance indicators such as productivity (e.g., Hoch, 2007; Parker et al., 2015). In particular, the
67	literature focusing on modern shared leadership structures in organizations, such as self-directed and
68	agile teams, points towards the positive impact of shared responsibilities because they foster the
69	sharing of values and norms and generate a stronger sense of team competence (Solansky, 2008;
70	McIntyre & Foti, 2013). Moreover, shared leadership has also been found to buffer against team
71	conflict (e.g., Bergman et al., 2012).

1.1. Role Differentiation

13	The efficiency of a structure of shared leadership has been argued to hinge upon a transparent
74	definition and allocation of roles (Bray & Brawley, 2002). Bales and Slater (1955), founders of the
75	role differentiation theory, proposed a dual leadership structure including two leadership roles
76	focusing on either task activities (instrumental leader) or socio-emotional activities (expressive
77	leader). A team structure encompassing both an instrumental and an expressive leader was found to
78	minimize time, effort, and psychological tensions between team members (Pearce & Conger, 2003).
79	Throughout time, researchers also suggested considering other leadership roles, such as goal setter,
80	planner, and group symbol as well as coach and promotor of team learning (Krech et al., 1962;
81	Wageman, 2001; Yukl et al., 2002).
82	Besides these already established suggestions on different leadership roles, a large number of other
83	studies have provided evidence that identifying different roles within an organizational team benefits
84	the team's performance (Lee et al., 2015). However, it should be noted that most of the studies on
85	role differentiation have focused exclusively on the roles of formal leaders (e.g., Quinn, 1988;
86	Kozlowski & Bell, 2013). Despite numerous calls of scholars in the field emphasizing the need to
87	also identify leadership roles for peer leaders within organizational teams (e.g., Lee et al., 2015), such
88	a set of leadership roles for employees within a team is still lacking.
89	Earlier research findings from the team sport context might provide inspiration to fill this knowledge
90	gap. In this regard, research on peer leadership revealed that athletes in sport teams could occupy
91	more leadership roles than the traditional roles of task and social leadership roles, outlined by Bales
92	and Slater (1955). First, Loughead et al. (2006) added the role of the external leader, who represents
93	the team towards outer parties, such as club management, media, and sponsors, while also securing
94	desired resources and support as well as buffering team members from outside distractions. Finally,
95	more recent research in the sport context further added the role of motivational leader, who was able
96	to motivate team members to give their very best (Fransen et al., 2014). This resulted in a peer
97	leadership categorization of four leadership roles, including the task, motivational, social, and
98	external leader (for definitions of each of these leadership roles, see Table 1). Noteworthy is that
99	sport teams in which leadership across these four leadership roles was occupied by different team
100	members appeared to perform better than teams relying on one heroic team captain (Fransen et al.,
101	2014). This is in line with the finding that, even though players and coaches expect their team captain

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to take up these four leadership roles, their captains can only rarely live up to these high expectations (Fransen et al., 2019).

Inspired by the already manifested value of shared leadership in modern organizations, as well as the initial evidence of four critical peer leadership roles in sport teams, this study aims to provide similar insight in peer leadership in organizations. As previous research emphasized that "the principles of elite performance in sport are easily transferable to business contexts" (Jones, 2002, p. 279; Wagstaff, 2017), we will rely on the four-fold categorization of peer leadership in sport settings. The underpinning reason for the similarities between both contexts is that sport and business teams face similar principles of leadership; while both types of teams are usually hierarchically structured with a single formal leader, research in both contexts demonstrated the advantages of leadership being shared among team members. More specifically, to provide a sound basis for further research on the topic, we aim to tackle four research questions in this study.

1.2. Aim 1: How Does Peer Leadership Quality Benefit the Team and its Members?

115 While there is a broad evidence base on the positive impact of shared leadership on team-level 116 outcomes like team effectiveness and confidence (e.g., Pearce & Sims, 2002; Wang et al., 2014; Wu 117 et al., 2020), two lacunae remain. First, most studies measured shared leadership as the degree to 118 which team members occupy leadership responsibilities. In other words, these studies rated people as 119 leaders based on the quantity of leadership behaviors that they showed. To obtain this quantification, 120 researchers used methods such as coding videotapes according to predefined leadership behaviors 121 (e.g., Künzle et al., 2010; Bergman et al., 2012) or simulation techniques such as policy-capturing 122 based on hypothetical scenarios (e.g., Drescher & Garbers, 2016). However, this quantitative 123 distinction does not provide us with any information on the quality of their leadership. As Zhu et al. 124 (2018) argued, the current measures of shared leadership only capture its configuration, while the 125 actual content of specific leadership roles, and the performance (i.e., leadership quality) hereof, has 126 been overlooked so far. It should be noted that previous experimental evidence obtained from the 127 sport context showed that peer leaders can also have a detrimental impact on team effectiveness (e.g., 128 Fransen et al., 2015a; Fransen et al., 2018). In other words, in order to predict the expected benefits 129 of peer leadership, it is essential to take the *quality* of peer leaders into account, rather than the 130 presence or the amount of leadership behaviors.

131 A second lacuna in the present research on peer leadership is that, while the effects on team 132 effectiveness have been extensively studied, the benefits for health and well-being remain unknown. 133 The few studies exploring these outcomes only tackled the health advantages for formal leaders 134 (Lovelace et al., 2007). While research in sport contexts has demonstrated that peer leadership quality 135 also entails benefits for team members' health and well-being (Fransen et al., 2020a), this 136 relationship has not been established in organizational contexts. Several scholars have acknowledged 137 a potential impact of shared leadership and health outcomes and proposed to further investigate the 138 health and well-being benefits (e.g., Zhu et al., 2018; Sweeney et al., 2019). However, while some 139 studies investigate the relation between shared leadership and health outcomes such as job 140 satisfaction, reduced levels of conflict and job stress (e.g., Shane Wood & Fields, 2007; Wang et al., 141 2014), the relationships with health at a physical or psychological level have not yet been tested. This 142 is unfortunate as promoting satisfied and healthy employees would be in an organization's best 143 economic interest (Litchfield et al., 2016). 144 To address these research lacunae, the present study will investigate the *leadership quality* of peer 145 leaders, more specifically the leadership quality of the best task, motivational, social, and external 146 leader in the team. Furthermore, we will investigate the relationship between peer leadership quality 147 on the one hand and of individual perceptions of both team effectiveness and indicators of well-being 148 on the other hand. We expect that the relations found in sport teams will hold for business teams as 149 well. 150 H1: Peer leadership quality on each of the four leadership roles is significantly positively correlated 151 with team effectiveness (H1a) and work satisfaction (H1b), while being significantly negatively 152 correlated with burnout (H1c). 153 1.3. **Aim 2: Is Team Identification the Missing Link?** 154 While most of the research on shared leadership has primarily focused on the investigation of its 155 direct effects, some scholars have also shed light on the mechanisms underpinning this relationship 156 (e.g., Hoch, 2007). Previous research in this regard suggested the potential mediating role of 157 employees' identification with their team (e.g., Zhu et al., 2017). This suggestion is in line with the 158 Social Identity Approach (SIA, Haslam, 2004), an integrative theoretical framework on (inter)group 159 processes that has been extensively applied to organizations. SIA argues that the behavior of team

members is shaped by thinking and behaving in terms of their shared social identity (i.e., as "us, team

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members") rather than in terms of their personal identity (i.e., as "you" and "me"). With respect to leadership, the social identity approach to leadership suggests that leaders are only effective to the extent that they succeed in managing – that is creating, representing, advancing, and embedding – a shared social identity in their teams (i.e., they provide identity leadership; Haslam et al., 2011). A large body of organizational research has evidenced the resulting benefits of these social identities, including employee performance, team satisfaction, and team effectiveness (e.g., Tanghe et al., 2010; Steffens et al., 2014; Reis & Puente-Palacios, 2019). Furthermore, a meta-analysis has shown that when employees identify strongly with their team or organization, this also benefited their health and well-being (Steffens et al., 2017). Several field studies in organizations further demonstrated the impact of perceived identity leadership by the formal leader on lower subsequent burnout among employees (Steffens et al., 2014; Steffens et al., 2018). The underlying reasoning is that team identification allows employees to feel supported by their colleagues, thereby contributing to their ability to cope with stress (Haslam et al., 2009). In fact, a systematic review with studies conducted in more diverse applied contexts (e.g., in a community, health/clinical, educational, or organizational setting), revealed that team identification-building interventions benefit a variety of health outcomes, ranging from reduced stress, depression, and anxiety, to enhanced well-being as well as cognitive and physical health (Steffens et al., 2020). Similar results have been recently found in the sport setting, where formal leaders as well as peer leaders demonstrating identity leadership were found to create a psychologically safe environment through which individuals' burnout is buffered, thereby enhancing their health (Fransen et al., 2020c). It should be noted, though, that when previous studies incorporated leadership as predictor in their analysis, this leadership was related to the leadership of the formal leadership (e.g., the manager). To our knowledge, no organizational studies have yet sought to understand the role of team identification in explaining the relationship between informal peer leadership quality and both the team effectiveness and member health and well-being. The present study aims to address this gap in the literature. To formulate our hypothesis, we rely again on previous sport research that demonstrated that the importance of identity leadership does not only hold for the coach as formal leader, but also for peer leaders within the team (e.g., Steffens et al., 2014). More specifically, research has shown that team identification mediated the relationship between high-quality athlete leadership and team effectiveness (Fransen et al., 2015a; Fransen et al., 2020a). Furthermore, a study with professional football teams revealed that the quality of peer leaders influenced athletes' health

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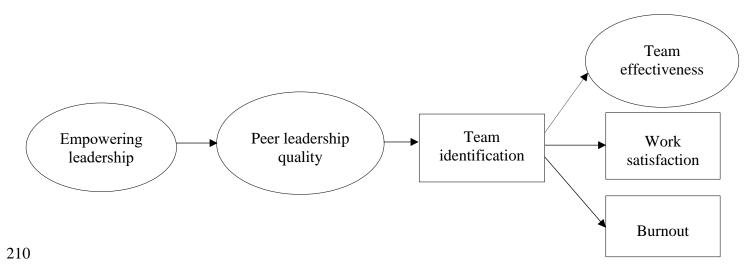
192 and burnout, but only to the extent that peer leaders were able to increase teammates' identification 193 with their team (Fransen et al., 2020a). We expect that these relations observed in sport contexts will 194 also hold for organizational contexts.

H2: Team identification mediates the relationship between peer leadership quality and team 196 effectiveness (H2a), work satisfaction (H2b), and burnout (H2c).

1.4. Aim 3: The Role of the Formal Leader in Promoting Shared Leadership

Despite the benefits that shared leadership structures can create, little is known about the antecedents that can promote the quality of these peer leaders. Even though research is still in its infancy, the formal leader is thought to play an essential role herein. Extant research suggests that a specific leading style of the formal leader, in particular empowering leadership, facilitates the emergence of shared leadership within a work team (Margolis & Ziegert, 2016; Van Knippenberg, 2017). Empowering leadership is defined as the extent to which leaders enhance autonomy, control, selfmanagement, and confidence in their team (Chen et al., 2011). In other words, we expect that the more a formal leader engages in behaviors that psychologically empower employees, the more employees will be stimulated to engage in qualitative leadership. H3: Empowering leadership behavior by the formal leader is positively related to higher peer leadership quality within the team.

209 Figure 1 represents the overall model that captures Hypotheses 1, 2, and 3.



211 Figure 1. Structural model representing the expected pathways of empowering leadership, peer leadership quality, and team identification as described in H1-4. Empowering leadership, peer 212

213 leadership quality and team effectiveness are depicted as latent variables inferred from their

subscales, as discussed in the method section.

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1.5. Aim 4: The Barriers Withholding Formal Leaders from Shared Leadership

216 Despite the benefits that team members can obtain from shared leadership, formal leaders might 217 consider the process of sharing leadership to be a threat to their formal status. According to Zhu et al. 218 (2018), formal leaders can experience "psychological territory infringement" (p. 39). In other words, 219 when team members occupy leadership roles, formal leaders might fear that the development of their 220 own leadership capabilities can be inhibited. Other potential thresholds mentioned in literature are the 221 fear of losing control, being perceived as lazy, or the idea that time-pressuring situations require 222 vertical leadership structures (Ntoumanis & Mallett, 2014). It is important to examine whether these 223 perceived thresholds actually exist or whether they are only fiction. However, as far as we know, no 224 research in organizations has yet investigated the relationship between the quality of peer leadership 225 on different roles and the perceived leadership quality of the formal leader. Preliminary evidence in 226 sport teams suggest that players in teams with high- compared to low-quality peer leadership also 227 perceived their coach as a better leader (Fransen et al., 2020d). This finding held for each of the four 228 leadership roles (e.g., the more task leadership quality on the team, the more players perceived their 229 coach to be a good task leader). These findings suggest that when coaches stimulate athletes to 230 engage in leadership responsibilities and thus become better peer leaders, these coaches will also be 231 perceived as better leaders themselves. According to this study, coaches' fear of losing authority 232 when sharing their leadership cannot be considered justified. We expect that the same conclusion 233 holds for organizational leaders.

234 H4: The leadership quality of the task, motivational, social, and external peer leader is positively

related to the perceived quality of the formal leader's leadership on each of the four roles.

2 Method

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2.1 Procedure

- 238 The present study was carried out in Belgium and had a cross-sectional, quantitative design. Data
- were collected by means of an online survey. Participants were required to be at least 18 years old, to
- be employed in Belgium, and to have a direct supervisor. Therefore, only people working in
- organizations with hierarchical levels were targeted during data collection, whereas self-employed
- 242 people without a leader were excluded.

243 First, human resource managers of organizations, as well as personal contacts (e.g., family, friends 244 and professional network), were randomly approached and contacted via mail with a written request 245 to participate in a study about leadership and well-being at work. Anonymity and confidentiality 246 were guaranteed and ethical approval for the implementation of this study was obtained from the 247 Social and Societal Ethics Committee at KU Leuven (G-2016 09 630). Participation was voluntary 248 and not reimbursed. However, as a motivational incentive, participation in a lottery was offered with 249 a one-in-five chance of winning a 20€ voucher from bol.com, if participants completed the survey 250 and provided their email address. Upon agreement with the human resource manager, the survey was 251 sent to participants' email address. All items included in this survey were presented in the 252 corresponding language of the participants (i.e., Dutch or French). Both translations of the 253 questionnaires were conducted by native speakers and double-checked by the researchers for 254 grammatical correctness and accuracy of content before distributing the survey.

2.2 Participants

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- A heterogeneous sample of 146 adult employees working in medium-sized to large organizations
- located in Flanders and Wallonia participated in this study. More specifically, the organizations
- 258 mostly belonged to the industries of civil aviation, clothing manufacturing, retail, and education.
- 259 Participants' age was retrieved through five age categories that ranged from 18 to 55+ years, with
- 260 16.4% of participants being between 18 and 25 years old, 39% of the participants between 25 and 35
- 261 years old, 14.4% between 35 and 45 years old, 19.9% between 45 and 55 years old and 10.3% of the
- participants being older than 55 years.
- In terms of gender, the sample consisted of 54.1% female and 45.9% male employees. Moreover,
- 264 76.7% of participants worked full-time, in contrast with the remaining 19.2% of participants working
- part-time, and 4.1% having another working format such as shiftwork or a mini job. Participants
- responded that there were on average 14 members in their team (SD = 30.8). The general work
- 267 experience ranged between less than one year and more than 20 years with an average of 7 years (SD
- 268 = 1.3). Finally, participants were employed in their present organization for an average of 5 years
- 269 (SD = 1.4).

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2.3 Measures

- All measures were self-reports. The reliability of all scales and their respective subscales used to test
- 272 H1, 2, 3, and 4 are reported in Table 2.

Table 1

Empowering leadership. The 22-item scale by Pearce and Sims (2002) was used with six subscales examining the degree to which the formal leader encourages self-reward, teamwork, participative goalsetting, independent action, opportunity thinking, and self-development. These items were rated on an 11-point Likert scale, ranging between 0 (*disagree completely*) and 10 (*agree completely*), with an example item being: "My team leader advises me to coordinate my efforts with other individuals who are part of the team".

Peer leadership quality. This variable encompasses the four leadership roles by Fransen et al. (2014), applied to the organizational context (see Table 1). Perceived leadership quality on each of these roles was assessed by presenting the role definition, followed by the instruction "Think of a team member that corresponds best with this role and rate the quality to which he/she fulfills this role." Participants rated this measure on a 10-point Likert scale ranging from 0 (very bad) to 10 (very good). Additionally, we determined potential overlap between leadership roles by asking "Is this person the same as the one you indicated earlier as task/motivational/social leader?" Based on this information, we identified whether the four leadership roles were occupied by one single leader or two, three, or four different leaders.

Definitions of the four leadership roles based on the work of Fransen et al. (2014b), that were presented to the participants.

Leadership role	Definition
Task leader	A task leader is in charge at work; this person helps the team to focus on our goals
	and helps in tactical decision-making. Furthermore, the task leader gives colleagues
	tactical advice during work processes and adjusts them if necessary.
Motivational	The motivational leader is the biggest motivator at work; this person can encourage
leader	colleagues to go to any extreme; this leader also puts fresh heart into colleagues who
	are discouraged. In short, this leader steers all the emotions at work in the right
	direction in order to perform optimally as a team.
Social leader	The social leader has a leading role besides work; this person promotes good relations
	within the team and cares for a good team atmosphere, e.g. during breaks, in the
	cafeteria or during social team activities. Furthermore, this leader helps to deal with
	conflicts between colleagues outside of work. This person is a good listener and is
	trusted by the colleagues.
External leader	The external leader is the link between our team and the people outside; this leader is
	the representative of our team towards the management. If communication is needed

with external organizations or media, this person will take the lead. This leader will also communicate the guidelines of the management to the team.

291 Formal leadership quality. Immediately after rating the perceived leadership quality of a team 292 member on a specific role, participants were asked to "Think of your formal leader and rate his/her 293 quality on this role". Again, this was asked for all four leadership roles with ratings ranging from 0 294 (very bad) to 10 (very good), which allowed for comparison between formal and peer leaders. 295 Team identification. Participants' identification with their team was measured with five items used 296 by van Dick et al. (2006). This measure was rated on a 7-point Likert-scale ranging from 1 (disagree 297 completely) to 7 (agree completely), with an example item being "I consider myself as part of my 298 team". 299 **Team effectiveness.** Individuals' perceived effectiveness of the team was examined with an overall 300 scale of effectiveness by Pearce and Sims (2002) using 26 items (e.g., "The team is highly effective 301 at implementing solutions"). Participants rated this measure on a 11-point Likert scale ranging 302 between 0 (disagree completely) and 10 (agree completely). Here, seven subscales distinguished 303 between: output, quality, change, organizing and planning, interpersonal, value, and overall 304 effectiveness. 305 Work satisfaction. A total of 11 items from the Job Diagnostic Survey (van Dick et al., 2001) were 306 used that tap into both the global work satisfaction and the satisfaction with the context. Participants 307 rated their work satisfaction on a 7-point Likert-scale ranging from 1 (not applicable) to 7 (fully 308 applicable). An example item is "I am generally satisfied with the kind of work I do in this job". 309 **Burnout**. The extent to which the participants experienced burnout was measured using the nine-item 310 subscale 'Emotional exhaustion' of the Maslach Burnout Inventory (Maslach & Jackson, 1981) with 311 ratings on a 7-point Likert-scale ranging from 1 (never) to 7 (every day). A sample item is "I feel 312 emotionally drained from my job".

Table 2
Means, standard deviations, and correlations between all included (sub)scales and their respective reliability.

	М	SD	α	1	9	10	11	12	13	14	15	16
1. Empowering leadership (EL)	5.96	2.25	.98									
2. EL – subscale Self-reward	4.11	2.52	.93	.72***	.34***	.37***	.37***	.41***	.44***	.46***	37***	.38***
3. EL – subscale Teamwork	6.41	2.36	.93	.86***	.54***	.49***	.52***	.53***	.66***	.59***	42***	.54***
4. EL – subscale Participative goalsetting	5.75	2.69	.96	.87***	.44***	.38***	.53***	.45***	.58***	.57***	42***	.37***
5. EL – subscale Independent action	6.63	2.46	.94	.89***	.36***	.36***	.33***	.44***	.54***	.53***	30***	.41***
6. EL – subscale Opportunity thinking	6.02	2.60	.92	.93***	.40***	.41***	.49***	.46***	.55***	.50***	37***	.41***
7. EL – subscale Self-development	6.29	2.64	.98	.95***	.45***	.45***	.50***	.54***	.61***	.60***	42***	.42***
8. Peer leadership quality (PLQ)	6.72	1.63	.82	.63***	.81***	.81***	.80***	.83***	.63***	.58***	31***	.52***
9. PLQ – task leadership	6.71	2.07	na	.48***								
10. PLQ – motivational leadership	6.90	1.93	na	.47***	54***							
11. PLQ – social leadership	6.81	1.88	na	.52***	.52***	50***						
12. PLQ – external leadership	6.60	2.03	na	.55***	.52***	.57***	.54***					
13. Team identification	5.08	1.25	.90	.65***	.58***	.43***	.51***	.54***				
14. Work satisfaction	5.08	1.06	.87	.63***	.54***	.41***	.36***	.56***	.69***			
15. Burnout	2.77	1.10	.90	44***	28**	27**	31***	19 [*]	42**	46***		

16. Team effectiveness (TE)	6.73	1.75	.94	.48***	.56***	.41***	.37***	.37***	.69***	.49**	24**	
17. TE - subscale Output	6.82	1.81	.91	.43***	.56***	.35***	.38***	.34***	.64***	.45***	24**	.92***
18. TE - subscale Quality	6.85	1.92	.88	.40***	.50***	.36***	.31***	.27**	.61***	.42***	19*	.93***
19. TE - subscale Change	6.46	1.98	.90	.43***	.54***	.41***	.34***	.33***	.65***	.42***	26**	.90***
20. TE - subscale Organization & planning	6.69	1.93	.89	.44***	.50***	.37***	.32***	.36***	.63***	.47***	23**	.93***
21. TE - subscale Interpersonal communication	6.01	2.08	.95	.43***	.46***	.36***	.34***	.35***	.57***	.39***	21*	.85***
22. TE - subscale Value	6.81	1.98	.97	.41***	.47***	.38***	.30***	.32***	.63***	.40***	17*	.86***
23. TE - subscale Overall	7.11	1.91	.96	.49***	.52***	.41***	.37***	.37***	.68***	.53***	24**	.95***
24. Formal leadership quality	5.93	2.08	.91	.76***	.57***	.50***	.56***	.55***	.63***	.56***	38***	.52***

^{*} p < .05; *** p < .01; **** p < .001. na = Value not available as the scale was restricted to only one item.

316 2.4 Data Analysis 317 Descriptive statistics (i.e., scale means, standard deviations) were computed as well as 318 intercorrelations to test H1, H3, and H4. The proposed mediation in H2 was tested via Structural 319 Equation Modeling (SEM) in R, using the maximum likelihood estimation method with robust 320 standard errors (MLR). The degree of "fit" of the entire model was based on the following indices: 321 the normed chi-square statistic (χ^2 /df), the comparative fit index (CFI), the Tucker-Lewis index (TLI) and the root mean square error (RMSEA). While a non-significant chi-square (χ^2) implies a good fit 322 323 of the data to the hypothesized model, the significance of this statistic increases with sample size. Therefore, we used the normed chi-square statistic (χ^2/df), which indicates a good fit when its value 324 is below 3:1 (Kline, 2005). According to Lance et al. (2006) the values of CFI and TLI ideally must 325 326 be larger than .90 to accept a good fit, while RMSEA should be .08 or lower to indicate an acceptable 327 fit. 328 As the impact of good leadership within the team might differ depending on whether employees are 329 full-time vs. part-time employed, as well as upon the size of the team, we conducted regression 330 analyses in SPSS to explore the moderating effect of type of employment and team size. Insights 331 about these potential moderating effects can provide useful information about the applicability of 332 shared leadership in diverse work settings. 333 3 **Results** 334 3.1 **Descriptive Statistics** 335 Table 2 reports the means, standard deviations, and correlation coefficients of the study variables. All 336 correlations are significant in the predicted directions (all p's < .05). In the following section, the 337 results will be reviewed as a function of the successive hypotheses. 338 However, before conducting all analyses for hypothesis testing, we aimed to gain insight on the 339 extent to which leadership is currently shared within participants' teams. More specifically, this step 340 can offer insight into whether the four leadership roles identified by (Fransen et al., 2014) are 341 generally distributed among different team members or rather occupied by one single team member. 342 To identify the number of peer leaders that occupied the roles of task, motivational, social, and 343 external leader, we asked participants to indicate whether the best leader on one leadership role

equaled the best leader indicated on the other leadership roles. Taken together, the results revealed

345 that only 17.0% of the participants indicated that the four leadership roles were occupied by one 346 single leader; 18.9% stated that these roles were taken on by two different team members; 40.9 % 347 reported that the roles were fulfilled by three different team members, and 23.5% of the participants 348 said that the four leadership roles were occupied by four different team members. In other words, an 349 overwhelming majority of most employees (i.e., 83%) indicated that the leadership in their team was 350 shared by different team members. Similar to sport contexts, where 70.5% of the players perceived 351 teammates other than the team captain as more capable to fulfill these roles (Fransen et al., 2014), 352 sharing leadership at work seems to be already acknowledged and adapted in our study sample. 3.2 Aim 1: How Does Peer Leadership Quality Benefit the Team and its Members? 353 354 Our first aim was to explore the benefits of peer leadership quality for team effectiveness and team 355 members' work satisfaction and burnout, as perceived by each individual. In line with H1a, the 356 correlations in Table 2 illustrate moderate positive relationships between perceived peer leadership 357 quality on each of the four leadership roles and the different aspects of team effectiveness (all p's < 358 .01). In other words, the higher the perceived quality of task, motivational, social, and external peer 359 leadership, the higher all seven dimensions of perceived team effectiveness. Aside from the 360 significant contribution of each role, task leadership had the strongest relationship with team 361 effectiveness (r = .56, p < .001). 362 Next, in line with H1b, the perceived leadership quality on all four leadership roles related positively 363 to team members' satisfaction with work (all p's < .001). Finally, in line with H1c, the results 364 revealed significant negative correlations between peer leadership quality and burnout (all p's \leq .05). 365 More specifically, the better the leaders within the team, the less burnout is experienced by team 366 members, a finding that held for each of the four leadership roles. Here, compared to all other roles, 367 social leadership was most strongly related to burnout (r = -.31, p < .001). Taken together, these 368 findings suggest an overall positive relation between the leadership quality within the team on all 369 four leadership roles and team effectiveness as well as team members' work satisfaction and burnout.

3.3 Aim 2: Is Team Identification the Missing Link?

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Secondly, we aimed to shed more light on the underpinning mechanisms – and in particular the role of team identification – explaining these relationships. Table 2 reveals positive correlations between the four leadership roles and team identification (all p's < .001). As for mediation, the resulting

model using SEM is depicted in Figure 2 and the results indicated a good model fit with $\chi^2 = 293.32$; $\chi^2/df = 1.76$; df = 166; p = .000; TLI = .93; CFI = .94; RMSEA = .08; and SRMR = .08. Based on a suggested modification index for a better model fit, we included two covariations: one between twee subscales of team effectiveness (i.e., interpersonal and value effectiveness) and one between work satisfaction and burnout. Both covariations were significant ($\beta = .62$, p < .001 and $\beta = -.36$, p < .001, respectively), which can be attributed to variance being explained by variables other than the ones included in the present model.¹

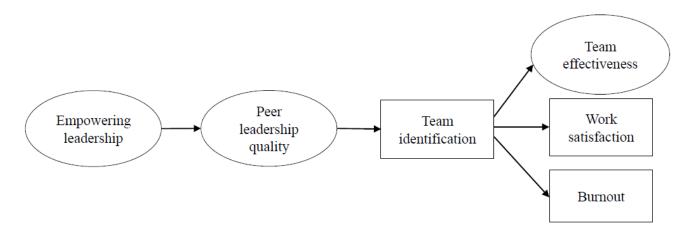


Figure 2. Structural model, representing the influence of empowering leadership on peer leadership quality, with the latter in turn influencing a) team effectiveness via full mediation of team identification, b) burnout via the same full mediation of team identification, and c) work satisfaction directly and indirectly via a partial mediation of team identification. Two covariations were included in the model: one between twee subscales of team effectiveness (i.e., Interpersonal and Value Effectiveness) and one between work satisfaction and burnout. Standardized regression coefficients are shown along each path as well as the proportions of explained variance (in italics). *p < .05; **p < .01; ***p < .001First, the model revealed a significant (and strong) positive relationship between peer leadership quality and team identification ($\beta = .74$, p < .001). Second, the model revealed significant direct relationships between team identification and all work-related outcomes, including team

effectiveness ($\beta = .71$, p < .001), work satisfaction ($\beta = .70$, p < .001), and burnout ($\beta = -.39$, p < .001)

394 .001).

¹ Given the complexity of the model, the model fit was tested again with less parameters. More specifically, instead of testing the model with all parameters (i.e., all subscales) we included only the composite scores of empowering leadership and team effectiveness. The model fit remained acceptable with $\chi^2 = 69.65$; $\chi^2/df = 2.68$; df = 26; p = .003; TLI = .92; CFI = .94; RMSEA = .08; and SRMR = .07.

- 395 The next step involved the examination of the indirect effects from peer leadership quality to all three
- outcomes for the paths going through team identification. First, the results suggest a significant
- indirect effect from peer leadership quality to team effectiveness (IE = .53, p < .001). This result
- implies a full mediation of team identification between peer leadership quality and team
- 399 effectiveness, providing support for H2a.
- Second, the results suggest a significant indirect effect from peer leadership quality to work
- satisfaction (IE = .52, p < .001). In contrast to the results described above the direct path between
- 402 peer leadership quality and work satisfaction remained significant, also when team identification was
- added as a mediator ($\beta = .37$, p < .01). This result indicates that the relationship between peer
- leadership quality and work satisfaction is only partially mediated by team identification. Therefore,
- 405 H2b can only partially be confirmed.
- Third, we found a significant indirect effect from peer leadership quality to burnout (IE = -.29, p =
- 407 .001). This finding suggests a full mediation of team identification between peer leadership quality
- and burnout, thereby confirming H2c. All standardized path coefficients and proportions of explained
- variance related to H2 are displayed in Figure 2.
- 410 Furthermore, regression analyses in SPSS did not reveal a moderating role of employment (part-time
- 411 vs. full-time), reflected by a non-significant moderating effect of employment for team effectiveness
- 412 $(F = 26.87, R^2 = .29, \beta = .12, p = .34)$, work satisfaction $(F = 35.14, R^2 = .34, \beta = -.05, p = .72)$, and
- 413 burnout (F = 8.76, $R^2 = .12$, $\beta = .20$, p = .16).
- Also, team size did not have a moderating role on the impact of peer leadership quality for team
- 415 effectiveness, work satisfaction, and burnout (F = 22.46, $R^2 = .25$, $\beta = -.09$, p = .24; F = 37.54, $R^2 = .25$
- 416 .35, $\beta = .04$, p = .62; F = 5.55, $R^2 = .07$, $\beta = -.05$, p = .59, respectively). We should note, though, that
- 417 there was a large variety in team sizes (ranging between 2 and 280 people on one team). To ensure
- 418 that our analysis for the moderating role of team size was not influenced by outliers, we also
- 419 performed the analysis after eliminating 10 unusually large outliers (i.e., team sizes larger than 21).
- As a consequence, the results for team effectiveness and work satisfaction became significant (F =
- 421 17.30, $R^2 = .21$, $\beta = -.46$, p < .01; F = 20.54, $R^2 = .24$, $\beta = -.49$, p < .01), meaning that the
- 422 effectiveness of peer leadership quality was even more prominent in smaller teams. For burnout, our
- results remained the same and team size did not act as a moderator (F = 1.01, $R^2 = .02$, $\beta = .12$, p = .12

424	.16), which implies a consistent strength of the relationship between peer leadership quality on
425	burnout regardless of the size of the team.
426	3.4 Aim 3: The Role of the Formal Leader in Promoting Shared Leadership
427	With respect to H3, SEM revealed a positive relationship between empowering leadership and
428	perceived peer leadership quality. This finding suggests that the more the formal leader is seen as
429	engaging in empowering leadership behaviors, the better team members perceive the quality of
430	leadership within the team ($\beta = .74$, $p < .001$). Furthermore, the moderately strong positive
431	correlations depicted in Table 2 make clear that empowering leadership of the formal leader is related
432	to improved peer leadership quality on each of the four roles ($r = .48$, $r = .47$, $r = .52$, $r = .55$ for task,
433	motivational, social and external leadership, respectively; all p 's < .001). In other words, the more the
434	formal leader engages in empowering leadership, the higher team members will rate the quality of
435	task, motivational, social, and external peer leadership within the team, which confirms H3.
436	3.5 Aim 4: The Barriers Withholding Formal Leaders from Shared Leadership
437	Finally, in line with H4, the correlations in Table 3 indicated significant positive and moderately
438	strong correlations for the relation between perceived leadership quality and the formal leader's
439	perceived leadership quality. Notably, this finding applied to all four leadership roles ($r = .3765$,
440	all p 's < .001). In other words, the higher the perceived quality of, for example, the social peer leader
441	within the team, the more team members perceived their formal leader as a better social leader.
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Table 3
Correlations between peer leadership quality of each leadership role and formal leadership quality.

	Peer leadership quality							
	Task Motivationa leadership		Social leadership	External leadership				
Perceived leadership quality o	f formal leader.							
as task leader	.60***	.41***	.44***	.37***				
as motivational leader	.43***	.47***	.47***	.39***				
as social leader	.42***	.44***	.57***	.49***				
as external leader	.51***	.45***	.45***	.65***				
				451				

*** p < .001.

4 Discussion

The present study aimed to provide a deeper insight in the nature of shared leadership in organizations by investigating the leadership of team members, thereby counterbalancing the abundance of research on leadership by the formal leader (Kozlowski & Bell, 2013). More specifically, we wanted to address four different research questions to advance research in this area.

Firstly, we aimed to provide novel insights into the benefits of shared leadership. Our findings revealed significant positive relationships between the quality of peer leadership and both perceived performance (i.e., team effectiveness) and well-being indicators (i.e., work satisfaction and burnout). While these findings corroborate previous research highlighting the importance of shared leadership structures in organizations for team effectiveness (e.g., Hoch, 2007; Zhu et al., 2018), they add to the literature that the quality of the leaders within the team is also important for team members' health and well-being. It is noteworthy that these findings held for each of the four leadership roles (i.e., task, motivational, social, and external leadership), thereby highlighting the importance of each of these roles. These results thus suggest that previous findings in sport contexts may also apply to organizations in regard of each of those outcomes (Fransen et al., 2014; Fransen et al., 2017; Fransen et al., 2020a).

Additionally, we tested for moderating effects of contextual variables. Until now, despite the important practical implications, most research on factors promoting or inhibiting shared leadership has neglected organizational-level or structure-based factors (Zhu et al., 2018). Our findings revealed that employment (i.e., working part-time vs. full-time) did not appear to moderate the relationship

473 between high-quality peer leadership and all critical work outcomes. This suggests that the above 474 findings can be generalized across diverse work settings. The link between having good peer leaders 475 within the team and team effectiveness and well-being thus remains stable regardless of the time 476 employees spend at work. 477 Next, also team size did not act as moderator for the relationship between high-quality peer 478 leadership and burnout. Again, this finding suggests that shared leadership consistently tempers 479 perceived burnout regardless of the number of people constituting a team. However, this does not 480 hold for team effectiveness and work satisfaction, where the effect of team size did appear to be 481 stronger in smaller teams. This finding is in line with the theorizing of Zhu et al. (2018) that larger 482 teams can mitigate the effect of shared leadership due to an increased risk of free-loading, social 483 riding, and coordination failures. However, in a meta-analysis by Nicolaides et al. (2014) who tested 484 the moderating role of team size in the shared leadership – performance relationship, the researchers 485 did not find a moderating effect of team size. Resolving these contradictive findings will be 486 particularly important as organizational teams can vary widely in size. In sum, these findings suggest 487 a generalizable impact of shared leadership interventions on specific outcomes. 488 Our second aim was to shed a deeper light on the mechanisms underpinning these relationships. Our 489 findings showed support for the social identity approach to leadership at various levels (Haslam et 490 al., 2011). First, high-quality peer leadership on each of the four roles was related to a higher team 491 identification among team members. Second, the more team members identified with their team, the 492 higher their reported team effectiveness. Third, the more team members identified with their team, 493 the higher their reported work satisfaction and the lower their burnout. 494 The latter finding is in line with previous research on the relationship between team identification and 495 team members' well-being (e.g., Steffens et al., 2017). Moreover, it supports recent work on the 496 'social cure', highlighting the health benefits of this shared feeling of 'we' and 'us' (Jetten et al., 497 2012; Haslam et al., 2019). Yet, while most of this evidence is built on the evidence of identity 498 leadership demonstrated by formal leaders (i.e., identity leadership; Haslam et al., 2011), the present 499 study adds that also leaders within the team are key to cultivate a shared identity, and by doing so, 500 boost the team's effectiveness as well as co-workers' health and well-being. We should note, though, 501 that the relationship between peer leadership quality and work satisfaction appeared to be only 502 partially mediated by team identification. Peer leadership quality thus also benefits work satisfaction

503 in a direct way. One explanation might be that, for instance, the social leader directly influences work 504 satisfaction by ensuring a close bond among members, providing support as a trusted person, and 505 creating a pleasant atmosphere, rather than by capitalizing on team identification. Indeed, research 506 shows that aspects linked to what constitutes a "social leader" in this study, such as perceived 507 collegial support, can create a favorable work atmosphere causing team members to develop positive 508 job attitudes (e.g., Gaan, 2008; Almeida et al., 2020). For instance, a study among business managers 509 by Bahniuk et al. (1990) revealed that job satisfaction was predicted by support from colleagues. 510 Our third aim was to explore the role of the formal leader in promoting shared leadership. Our 511 findings revealed that formal leaders stimulated peer leadership quality by engaging in empowering 512 leadership, which in turn seems to be an asset for reaching critical work outcomes. According to a 513 study by Kim and Beehr (2017), a possible mechanism underlying this relationship is the enhanced 514 psychological states in team members, such as self-efficacy and psychological ownership. By 515 encouraging initiative among employees, such as letting them make decisions, a sense of 516 responsibility toward their job is established, which in turn is reflected in positive workplace 517 behavior such as peer leadership. 518 Fourth and finally, we took a closer look at possible barriers withholding formal leaders from implementing shared leadership. As in sport settings (Fransen et al., 2020d), we found that the higher 519 520 the perceived leadership quality within the team, the more the formal leader is considered to be a 521 good leader. Thus, empowering employees to take up leadership roles within their team has the 522 potential to strengthen their formal leadership status instead of reducing it.

4.1 Practical Implications of the Findings

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The present study offers a more detailed understanding of the practical value of shared leadership in work teams. As a starting point, we recommend formal leaders to reconsider their management style and to empower their employees. Empowering leadership, such as promoting participative goal setting or self-development, can stimulate employees to take on and fulfill peer leadership roles well. Organizations can help formal leaders in empowering their team members by providing them with a specific training. First, team members need to become motivated to take up responsibility. To do this, the formal leader can formally appoint leaders within the team and give each member a participatory role which capitalizes on their own expertise. Also, demonstrating good listening skills, asking for

532 input and delegating authority to their employees are skills leaders can be taught in order to engage in 533 empowering leadership (Lee et al., 2018). 534 Next, the findings clearly stress the positive relationship between high-quality peer leadership and 535 both team effectiveness and well-being in teams across a wide array of organizations. These 536 favorable outcomes further support the practical relevance of role differentiation and team 537 identification in organizational contexts (cfr. Carson, 2006). 538 Given the positive relationship with each of the four leadership roles, attention towards more diverse 539 roles within teamwork is helpful, rather than simply concentrating on general or task-related 540 leadership. With this principal guideline in mind, it is critical that team leaders identify the essential 541 leadership roles in their organization and formally appoint the right leaders on these roles. One 542 method by which the appropriate peer leaders can be identified is Shared Leadership Mapping that 543 has been proven effective in organizational teams (Fransen et al., 2015b; Fransen et al., 2020b). In 544 this analysis, team members rate each other's quality on different peer leader roles, which results in 545 clear insights about the key figures within the team. Following this, formal leaders can then invest 546 time in the further development of those peer leaders, for example by improving their identity leadership (Haslam et al., 2011). With help of the 5R^S program by Fransen et al. (2020b), team 547 548 members learn how to cultivate a shared social identity to grow and flourish as a team, rather than as individuals. Preliminary evidence on the impact of the 5R^S program in organizational teams points 549 550 towards the program's potential to improve team functioning as well as strengthening the team 551 identity and providing individuals the opportunity to grow and flourish (Fransen et al., 2020b). 552 4.2 **Limitations of the Present Study** 553 Apart from the strong points of this study, such as the inclusion of employees from a diverse set of 554 organizations, a critical look also reveals some shortcomings. First, notwithstanding the significant 555 and promising relationships, no causal effects can be claimed due to the cross-sectional nature of this 556 study. Further, these relationships need to be interpreted with caution given the relatively small 557 sample size in relation to the number of parameters in this model (N = 146). 558 Second, the theoretical framework of this study builds upon the four leadership roles derived from 559 sport teams (Fransen et al., 2014). The findings of our study suggest that also in organizations the 560 quality of peer leaders on each of these roles is positively related with both team effectiveness and

561 well-being, thereby providing initial confirmation on the leader categorization in sport. Nevertheless, 562 it is likely that this four-role typology is not exhaustive. Future research is needed to identify 563 alternate organization-specific roles for peer leaders that might even have a stronger effect on team 564 effectiveness and well-being of employees. 565 Third, the study findings relied on participants' individual perceptions about their team rather than 566 team-level perceptions. In other words, while we are sure that the majority of the collected data stems 567 from employees working in different teams (as they indicated different organizations), some of the 568 participants might have worked in the same team. Therefore, the current sample did not allow us to 569 identify clusters within our sample and to analyze our data at the team or organizational level. A 570 fruitful avenue for future research would thus be to analyze the generalizability of our findings, while 571 controlling for team- or organizational-level effects. 572 4.3 **Future Research** 573 Despite the increased awareness of shared leadership and its value, some unchartered areas still await 574 future research. First, besides team size and type of employment, future research might investigate 575 additional moderators that influence the effectiveness of shared leadership. For example, Bligh et al. 576 (2006) argued that teams dealing with complex tasks might benefit more from shared leadership than 577 teams dealing with simple tasks, since active inclusion of multiple members might enhance a variety 578 of work processes. 579 Second, in this study participants were asked to only think of the best team member when rating peer 580 leadership quality. However, although other team members might not be perceived as the best leader 581 on a specific leadership role, they can still be influential. Initial evidence from the sport context 582 already showed that sport teams reap greater benefits of a shared leadership structure, in which more 583 than one player fulfills a leadership role (e.g., having two task leaders instead of one; Leo et al., 584 2019). By mapping the entire leadership structure in the team (e.g., using social network analysis), 585 future research can investigate whether having more leaders on each role entails higher benefits for 586 team effectiveness and team member well-being. 587 **Conclusion**

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To conclude, this study suggests that shared leadership constitutes a promising approach to leadership for various reasons. The theoretical framework of four leadership roles derived from sport

590	research by Fransen et al. (2014) also seems to be applicable in organizations. In fact, high-quality
591	peer leadership in organizational teams on each of these roles appears to relate positively to work
592	satisfaction and team effectiveness, and negatively to burnout. Drawing on the Social Identity
593	Approach, these relationships were found to be mediated by team identification. Moreover, by
594	empowering their team members to take the lead in different roles, formal leaders can stimulate high-
595	quality peer leadership on these roles and by doing so, are also perceived as better leaders
596	themselves. Based on these study findings, then, it can be concluded that the perceived barriers
597	withholding formal leaders do not necessarily hold ground and the fear of losing their own leadership
598	status should not stop them from implementing shared leadership within their teams, even on the
599	contrary. At the end of the day, a strong shared team identity seems to play a crucial role in
600	successfully implementing shared leadership. This 'sense of us' will be particularly important, if not
601	necessary, to reap the benefits of teamwork within the organizations of today and tomorrow.
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